

# Automobile Manufacturers Association Consolidated Specification Questionnaire For 1940 Models Mechanical Details

Make of Car BUICK Model 1940 SERIES 70 ROADMASTER  
Name of Maker BUICK MOTOR DIVISION Address FLINT, MICHIGAN

Date Sept. 18, 1939

**NOTE: (1) Subject to Correction:** It is understood that the following data is subject to correction in the case of cars not in production at the time this compilation was requested.  
**(2) Only standard equipment included in Factory Delivered price should be included in this questionnaire.**

**PERFORMANCE**

Car Weight per cubic inch piston displacement .....  
Horsepower per cubic inch ..... 44  
Car Weight per horsepower .....  
{A} Engine Revolutions per mile 2756 at 50 m.p.h.  
{B} Piston Displacement per mile =  $A \times \frac{Piston\ displacement}{Car\ Weight}$  510  
Piston Displacement per mile per pound =  $\frac{B}{Car\ Weight}$  .....  
Car Weight per square inch of brake lining area .....  
Ratio of car weight to weight of four tires without tubes .....

{NOTE: Car Weight, for performance figure, is skipping weight for five-passenger, four-door sedan, plus 500 pounds for liquids and passengers.}

**ENGINE**

No of cylinders ..... 8  
Valve arrangement ..... In Head  
Bore 3-7/16" Stroke 4-5/16"  
Engine—make and model ..... Own - Series 70  
Cylinder arrangement (angle of Vee in degrees) In Line  
Cylinder head, cast iron or aluminum ..... Cast Iron  
Piston displacement ..... 320.2 cu. in.  
Taxable horsepower ..... 37.81  
Maximum brake horsepower at R.P.M. 141 at 3600  
Maximum torque (lbs.-ft.) of R.P.M. 269 at 2000  
Compression Ratio—  
Standard 6.25 - 1 Optional .....  
Standard compression pressure—pounds—  
At cranking speed ..... 114  
At what R.P.M. 130 at 1000 r.p.m.

**PISTONS and RINGS**

Piston Aluminum Company of America, and,  
Make Bohn Aluminum & Brass Corporation  
Material Al. Alloy

**PISTONS and RINGS (cont'd)**

Features—~~with aluminum rings, aluminum oxide finish, ...~~ Modified Dome  
Weight—~~without rings, pin or bushing~~ 17-1/4  
Length 4-7/16"  
Clearance—  
Top land .026" to .033"  
Skirt .0020" to .0026"  
Piston ring groove depth—  
Oil .179" Compression .179"  
No. of oil rings used per piston ..... 2  
Width of oil rings 3/16"  
Width of oil ring gap .010" - .015"  
No. of compression rings used per piston ..... 2  
Width of compression rings 3/32"  
Width of compression ring gap .010" - .015"  
Maximum wall thickness of oil rings .150"  
Maximum wall thickness of compression rings Upper .172"  
Lower .150"

**RODS and PINS**

Wristpin—  
Length 3-1/16" Diameter .8747"  
Locked in rod, piston or floating ..... In Rod  
Clearance .0005" to .0004"  
Hole finish diamond bored, ...  
Connecting rod—  
Length—center to center 8-1/4"  
Material H.R.S. 1045  
Weight—ounces 38  
Crankpin journal—  
Diameter 2-1/4" Length 1-5/16"  
Lower bearing—  
Material Babbitt  
Make Own  
Clearance .0008" to .0018"  
End play .005" to .010"  
Shim—solid, laminated or none Solid  
Spun or separate Centrifugal Cast  
Rods and pistons removed from above or below Above

Make of Car ..... BUICK ..... Model ..... 1940 SERIES 70 ..... Date ..... Sept. 18, 1939

**CRANKSHAFT**

Vibration dampener used—yes or no. **Yes**  
 Type **Laminated steel flywheel supported on steel leaf springs.**  
 Crankshaft counterweights used, number of **8**  
 Which main bearing takes thrust **Center**  
 Crankshaft end play **.004" to .008"**

**Main bearing—**

Type: Cast-in or **Slip-in** **Yes**  
 If slip-in: Removable from below **Yes**  
 Necessary to align ream **Yes (Except in Sets)**  
 Material **Steel Backed Babbitt**  
 Clearance **.0007" to .0022"**  
 Shim—solid, laminated or none **Solid**

**Main bearing journal diameter x length—**

No. 1. **2-9/16" x 1-9/32"**  
 No. 2. **2-5/8" x 31/32"**  
 No. 3. **2-11/16" x 1-15/32"**  
 No. 4. **2-3/4" x 31/32"**  
 No. 5. **2-13/16" x 2-15/32"**  
 No. 6. ....  
 No. 7. ....  
 No. 8. ....  
 No. 9. ....

**Crankshaft gear or sprocket—**

Make **Own**  
 Material **C. D. S. 1112**

**CAMSHAFT**

**Camshaft gear or sprocket—**

Make **Own**  
 Material **Cast Iron 13M**

**Timing chain—**

Make **Link Belt**  
 Number of links **50**  
 Width **1"**  
 Pitch **.500"**  
 Adjustment—none, automatic or manual **None**

**VALVES**

**INTAKE VALVE—**

Make **Thompson, or, Rich**  
 Material **3140 or 1050**  
 Overall length **5-1/4"**  
 Actual overall diameter of head **1-25/32"**  
 Angle of seat **45°**  
 Is valve seat an insert? **No** Material.....  
 Stem diameter **.3720"**  
 Stem to guide clearance **.0015" to .0035"**

**VALVES (cont'd)**

Lift **.347"**  
 Spring pressure and length—  
 Outer—  
 With valve closed—lb. **29** ins. **1-15/16**  
 With valve open—lb. **70** ins. **1-19/32**  
 Length out of engine—ins. **2-5/16**  
 Inner—  
 With valve closed—lb. **18** ins. **1-21/32**  
 With valve open—lb. **48** ins. **1-5/16**  
 Length out of engine—ins. **1-7/8**

**EXHAUST VALVE—**

Make **Thompson**  
 Material **XC R**  
 Overall length **5-1/4"**  
 Actual overall diameter of head **1-7/16"**  
 Angle of seat **45°**  
 Is valve seat an insert? **No** Material.....  
 Stem diameter **.3715"**  
 Stem to guide clearance **.0021" to .0039"**  
 Lift **.342"**  
 Spring pressure and length—  
 Outer—  
 With valve closed—lb. **29** ins. **1-15/16**  
 With valve open—lb. **70** ins. **1-19/32**  
 Length out of engine—ins. **2-5/16**  
 Inner—  
 With valve closed—lb. **18** ins. **1-21/32**  
 With valve open—lb. **48** ins. **1-5/16**  
 Length out of engine—ins. **1-7/8**

Operating tappet clearance (hot or cold)—intake **.015 Hot**  
 Tappet clearance for valve timing—intake.....  
 Operating tappet clearance (hot or cold)—exhaust **.015 Hot**  
 Tappet clearance for valve timing—exhaust.....  
 Hydraulic valve lifters—yes or no **No**  
 Valve timing—  
 Intake opens **14** degrees BUDC piston travel.....  
 Intake closes **71** " ALDC " " .....  
 Exhaust opens **58** " BLDC " " .....  
 Exhaust closes **25** " AUDC " " .....  
 Valve Timing Marks on Flywheel, Vibration Damper, None **None**

**LUBRICATION**

Lubricating system type—pressure or splash **Pressure**  
 Oil pressure to—  
 Main bearings—yes or no **Yes**  
 Connecting rods—yes or no **Yes**

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**LUBRICATION (cont'd)**

Wristpins—yes or no ..... **No** .....  
 Camshaft bearings—yes or no ..... **Yes** .....  
 Timing gear or chain lubrication—positive or splash ..... **Positive** .....  
 Oil pump type ..... **Gear** .....  
 Oil grade recommended—SAE viscosity and temperature range—  
 Not lower than 32°F. .... **20W or SAE 20** .....  
 As low as plus 10°F. .... **20W** .....  
 As low as minus 10°F. .... **10W** .....  
 Below minus 10°F. .... **10W plus 10% Kerosene** .....  
 Normal oil pressure—lbs. at M.P.H. .... **45 at 35** .....  
 Pressure at which relief valve opens ..... **45** .....  
 Capacity of oil reservoir—quarts, dry ..... **10** ..... refill ..... **8** .....  
 Oil pressure gauge make ..... **AC** .....  
 Oil reservoir level gauge type ..... **Stick** .....  
 External oil filter make ..... **AC** .....  
 Oil cooler make ..... **None** .....  
 Chassis lubrication—  
 Type ..... **High Pressure** .....  
 Make ..... **Lincoln** .....

**FUEL**

Gasoline tank—capacity ..... **17** .....  
 Fuel feed—  
 Type—vacuum tank, electric pump, gravity vacuum  
 pump or camshaft pump ..... **Camshaft Pump** .....  
 Make ..... **AC** ..... Model .....  
 Carburetor—  
 Make ..... **Stromberg** ..... Model ..... **A.A.V. - 26** .....  
 Size ..... **1-1/4"** .....  
 Type—  
 Up or down draft ..... **Down** ..... Single or dual ..... **Dual** .....  
 Intake manifold heat control—manual, automatic or none ..... **Automatic** .....  
 Automatic chokes, make ..... **Stromberg** ..... Model .....  
 Air cleaner—intake silencer make ..... **AG** .....  
 Muffler make ..... **Hayes** .....

**COOLING**

Radiator Pressure Control Valve ..... **7#** .....  
 Water pump—  
 Type ..... **Centrifugal (Ball Brg.—Spr. Loaded Seal)** .....  
 Drive ..... **Belt** .....  
 Is pump equipped with packing out. .... **No** .....  
 Water circulation thermostat make ..... **Harrison** .....  
 By-pass for recirculation—yes or no ..... **Yes** .....  
 Radiator shutter—Make ..... **None** .....  
 Radiator core—

**COOLING (cont'd)**

Type ..... **Vee-Cellular** .....  
 Make ..... **Harrison** .....  
 Cooling system—capacity, quarts .....  
 Water jackets full length of cylinders—yes or no ..... **No** .....  
 Lower radiator hose—  
 Inside diameter ..... **1-9/16"** ..... Length ..... **Elbow Type** .....  
 Upper radiator hose—  
 Inside diameter ..... **1-9/16"** ..... Length ..... **Elbow Type** .....  
 Fan belt—  
 Make ..... **Various** .....  
 Number used ..... **1** .....  
 Angle of vee .....  
 Length, outside ..... Width, maximum .....  
 Fan—  
 Make ..... **Hayes Industries** .....

**IGNITION**

Ignition unit—  
 Make ..... **Delco-Remy** ..... Model ..... **1110805** .....  
 Manual or octane selector, degrees advance ..... **retard** .....  
 Maximum automatic advance, degrees ..... **22 - 26** .....  
 Vacuum advance, degrees ..... **10 - 12** .....  
 Breaker gap ..... **.015"** .....  
 Cam angle ..... **31** .....  
 Timing—Breaker points open ..... **6** ..... degrees crankshaft travel  
~~..... before top center~~  
~~.....~~  
 Timing marks on flywheel, vibration dampener or none ..... **Flywheel** .....  
 Firing order ..... **1 - 5 - 2 - 6 - 3 - 7 - 4** .....  
 Amperage draw of ignition coil—  
 With engine stopped ..... **4-1/2** .....  
 With engine idling ..... **2-1/2** .....  
 Ignition lock make ..... **Delco-Remy, and, Briggs-Stratton** .....  
 Spark plug—  
 Thread—10 m.m., 14 m.m. or 18 m.m. .... **14** .....  
 Make ..... **AC** ..... Model ..... **46** .....  
 Gap ..... **.025"** .....  
 Ignition cable make ..... **Packard** .....

**BATTERY**

Make ..... **Delco-Remy** .....  
 Capacity—ampere hours ..... **115** ..... @ 20 hour rate  
 Number of plates per cell ..... **17** .....  
 Batch charging rate—  
 Start ..... **7 or Higher** ..... Finish ..... **If gassing not more than 7.** .....  
 Which battery terminal is grounded ..... **Negative** .....  
 Location of battery ..... **Under Hood** .....

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**STARTING MOTOR**

Make Delco-Remy Model 1107908  
 Normal engine cranking speed .....  
 Lock test—  
 Amperage draw ..... 600  
 Volts ..... 3  
 Torque in pounds feet ..... 16  
 No load test—  
 Amperage draw ..... 65  
 Volts ..... 5 R.P.M. 5500  
 Type of drive ~~overhead~~ sliding gear with overrunning clutch  
 Starter operation—check items required to start engine  
 1. Turn on ignition ..... Yes  
 2. Depress starter pedal .....  
 3. Depress accelerator pedal ..... Yes  
 4. Depress clutch pedal .....  
 5. Operate button on dash .....  
 6. Pull out throttle Either 3 or 6 (not both)  
 Starting motor pinion meshes front or rear Front  
 No. of teeth in flywheel ..... 156  
 Face width of flywheel teeth ..... 43/64"  
 Flywheel teeth integral or steel ring Steel Ring  
 Gear ratio between starter armature and flywheel 17.33

**GENERATOR**

Make Delco-Remy Model 1102668  
 Field fuse capacity .....  
 Type—third brush, shunt, etc. Shunt  
 Current regulator, voltage regulator or current and voltage control unit Current and Voltage  
 Cutout relay—  
 Voltage at closing ..... 6.3 to 6.9  
 Amature speed at closing ..... 880  
 Car speed at closing ..... 8 to 10  
 Amperes to open 0 to 3-1/2 Discharge  
 Maximum charging rate cold—  
 Temperature .....  
 Amperes ..... 32 to 34  
 Voltage ..... 8  
 R.P.M. ..... 2000  
 Maximum charging rate hot—  
 Temperature .....  
 Amperes ..... 32 to 34  
 Voltage ..... 8  
 R.P.M. ..... 2400  
 Car speed for maximum charging rate ..... 20 APPROX.  
~~Charging~~ charge indicator make 40

**LAMPS**

Lighting switch make Delco-Remy  
 Are tail and dash lights in series ..... No  
 Headlight—  
 Make ..... Guide  
 Location—in fender, in cutaway, on radiator shell, fender  
 Candlepower of bulb ..... 45 - 55 Watts  
 Type of bulb ..... Sealed Beam  
 Parking or fender light make ..... Guide  
 Tail and stop light make ..... Guide  
 Horn—  
 Type—vibrator or motor No. used 2  
 Make ..... Delco-Remy  
 Amperage draw of each ..... 16 and 17

**CLUTCH**

Make Own (Disc make - Borg and Beck)  
 Semi-centrifugal ..... No  
 Power operated unit—none None  
 Vibration insulation or absorber—fabric, rubber blocks or springs Spring  
 No. of clutch driving discs ..... 1 and Flywheel  
 No. of clutch driven discs ..... 1  
 Clutch facing—  
 Material—woven or moulded asbestos, cork Woven  
 Inside diameter ..... 6-1/2"  
 Outside diameter ..... 10-1/2"  
 Thickness ..... 1/8"  
 No. required ..... 3

**TRANSMISSION**

Transmission—  
 Make Own Model Series 70  
 No. of forward speeds ..... 3  
 Shift lever location—dash, steering column, floor, front column Steer. Column  
 If steering column gearshift—  
 Are gears meshed by rod linkage or cable Rod Linkage  
 Are gears selected by rod linkage or cable Rod Linkage  
 Automatic or auxiliary shifting mechanism—  
 Make ..... None  
 Type—centrifugal, vacuum, electric or hydraulic  
 Automatic overdrive—  
 Make ..... None  
 Oil capacity—quarts  
 Oil grade recommended—S.A.E. viscosity  
 Summer ..... Winter .....  
 Gear ratio in high—standard 5-passenger 4-door sedan Direct

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TRANSMISSION (Cont'd)

Transmission ratio—  
 In overdrive ..... In second 1.53 - 1  
 In low 2.39 - 1 ..... In reverse 2.39 - 1  
 Constant mesh gears on second ..... Yes  
 Spur or helical gears—  
 For second speed ..... Helical  
 For first speed ..... Helical  
 For reverse speed ..... Helical  
 Synchronous meshing second and third gears ..... Yes  
 Transmission oil—  
 Capacity—pints ..... 2-1/2  
 Grade recommended—S.A.E. viscosity Above -10°F SAE 90 EP  
 Below -10°F SAE 80 EP  
 Summer ..... Winter  
 Universal joints—  
 Make ..... G.M., or Spicer  
 Number used ..... 1  
 Type—fabric, rubber, metal with anti-friction bearing or metal with plain bearing Metal/Plain Brg.  
 Lubricated with Transmission Lubricant  
 Drive taken through springs, torque arm, torque tube or radius rods ..... Torque Tube  
 Torque taken through springs, torque arm, torque tube or radius rods ..... Torque Tube

REAR AXLE

Rear axle—  
 Make Own Model Series 70  
 Type—semi, full or three-quarter floating Semi  
 Minimum road clearance under center of rear axle—tires inflated 7-3/4"  
 Rear axle oil—  
 Capacity—pints ..... 3  
 Grade and type recommended—S.A.E. viscosity  
 Summer SAE 90 Hypoid Winter \*  
 Type of gearing—spiral bevel, worm, hypoid Hypoid  
 Gear ratio—standard 5-passenger 4-door sedan 3.9 - 1  
 Optional gear ratios ..... None  
 Number of teeth—  
 In ring gear ..... 39 In pinion ..... 10  
 How is pinion adjusted—screw or shims Shims  
 How is pinion bearing adjusted—screw or shims None  
 Are pinion bearings in sleeve ..... No  
 Backlash between pinion and ring gear ..... .008" to .010"  
 Are pinion bearings preloaded ..... Yes  
 How is pinion bearing preload obtained ..... At Manufacturing  
 Are differential bearings preloaded ..... Yes  
 How is differential bearing preload obtained ..... Screw

TIRES and WHEELS

Tires—  
 Make U.S. - Firestone - Goodyear  
 Size 15" x 7.00" No. of plies 4  
 Inflation pressure—Front 25# Cold Rear 30# Cold  
27# Warm 34# Warm  
 Rim—Diameter 15" Width 5.00"  
 Axle clearance for jack—tires inflated  
 Front ..... Rear  
 Wheels—  
 Type ..... Demountable Steel Disc  
 Make ..... Motor Wheel

SPRINGS

FRONT SPRING—

Independent or conventional suspension ..... Independent  
 Type—coil, semi-elliptic or transverse Coil  
 Make Own  
 Material ..... Steel 9260  
 Sway eliminators—torsional, lateral, none Torsional  
 If leaf—  
 Length ..... Width .....  
 Number of leaves—5-passenger, 4-door sedan  
 Are radius rods used on axle .....  
 Shackled front or rear .....  
 Anti-shock shackle location .....  
 If coil—  
 Free length ..... 14-3/4"  
 Length under ~~curb weight~~ Normal Load 9-1/2"  
 Rate for above 106 at Wheel ..... pounds per inch

REAR SPRING—

Independent or conventional suspension ..... Coil Spg. Sus.  
 Type—coil, semi-elliptic or transverse Coil  
 Make Own  
 Material ..... Steel 9260  
 Sway eliminators—torsional, lateral, none Torsional  
 If leaf—  
 Length ..... Width .....  
 Number of leaves—5-passenger, 4-door sedan  
 Spring leaves lubricated with .....  
 Spring cover make .....  
 Spring shackles—  
 Front—Type ..... Make .....  
 Rear—Type ..... Make .....  
 Spring bolts—  
 Type .....  
 If coil—  
 Free length ..... 18-1/4"  
 Length under curb weight ..... 10"

\* For temperatures above minus 10°F. use SAE 90 Hypoid.  
 For temperatures below minus 10°F. use SAE 80 Hypoid.

# 1940 MODEL SPECIFICATIONS

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## SPRINGS (cont'd)

Rate for above ..... 145 at Wheel ..... pounds per inch  
 Shock absorbers—  
 Make ..... Delco .....  
 Type—*one way, two way* ..... 2 .....  
 Fluid capacity—front ..... rear .....

## STEERING

Steering gear—  
 Type ..... Worm and Double Roller  
 Make ..... Saginaw ..... Model ..... Series 70  
 Ratio ..... 19 : 1  
 Lubricant recommended ..... Steering Gear Lubr. GM 4568M  
 Steering wheel diameter ..... 18"  
 Drag link longitudinal or transverse ..... None  
 Tie rod—*one or two* ..... 2 .....  
 Is intermediate steering arm used ..... No  
 Number of turns of steering wheel for full left  
 to right swing of wheels ..... 4-1/4  
 Car turning radius—*feet—right, left or both* ..... 21-3/4 ft.  
 Caster—*degrees* ..... Pos. 3/8 to 3/8 .....  
 Camber—*degrees or Rev. 1/4 in. to* ..... Pos. 1  
 Toe-in—*inches* ..... 0 to 1/16  
 Crosswise inclination of kingpin—*degrees* ..... 3-1/2 to 4-1/2  
 Front axle—  
 Make ..... Model .....  
 Section type—*I-beams, tubular or none* .....  
 End type—*Elliott or reverse Elliott* .....  
 Minimum road clearance—*tires inflated* .....

## BRAKES

Foot brakes—  
 Make ..... Bendix or Delco .....  
 Type of mechanism—*hydraulic or mechanical* ..... Hydraulic  
 If vacuum booster is standard, state make .....  
 Brake lining moulded, semi-moulded or woven ..... Woven on primary,  
~~rubber~~ ..... moulded on secondary.

## BRASS (cont'd)

Material ..... Centrifuge ..... Diameter ..... 12"  
 Lining—  
 Length per wheel ..... 22-15/16"  
 Width ..... 2-1/4" ..... Thickness ..... 3/16"  
 Clearance—*for .008" to .010" heel .008" to .010"*  
 Total foot braking area ..... 200 sq. in.  
 Percent braking power on rear wheels ..... 47%  
 Hand brake location ..... ~~under cowl at left~~  
 Hand lever operates ..... ~~rear service brakes~~ ..... Rear Service  
 Hand brake—  
 Internal or external ..... Internal  
 Drum diameter ..... 12"  
 Lining—  
 Length per drum ..... 22-15/16"  
 Width ..... 2-1/4" ..... Thickness ..... 3/16"  
 Clearance ..... .008" to .010"

## FRAME

Frame—  
 Make ..... Midland  
 Type ..... Double Drop  
 Depth—*maximum* ..... 6-1/8"  
 Thickness—*maximum* ..... 5/32"  
 Flange width—*maximum* ..... 2-3/4"  
 Wheelbase ..... 126"  
 Tread—  
 Front ..... 59-23/32"  
 Rear ..... 59-21/32"  
 Weight of standard 5-passenger four-door sedan—  
 Shipping .....  
 Curb .....  
 Per cent on front axle .....  
 Price of standard 5-passenger, 4-door sedan .....  
 \* First serial number, this series ..... Flint, Mich - #13596807  
 Serial number location ..... Right side top of frame  
 by dash.  
 Overall length of car—  
 With bumpers and bumper guards ..... 213-9/16"

\*South Gate, Calif. - #23601856  
 Linden, N.J. - #33611856

# 1940 MODEL SPECIFICATIONS

Make of Car **BUICK** Model **1940 SERIES 70** Date **Sept. 18, 1939**

NOTE—In giving bearing dimensions, kindly use the following order: inside diameter, outside diameter and width. Where cup and cone bearings are used, give both cup and cone numbers.

## BEARINGS and Fan

Water pump/bearing—  
 Make or type **New Departure**  
 Size or number **954208**

Fan bearing—  
 Make or type .....  
 Size or number .....

Starting motor commutator end bearing—  
 Make or type **Cast Iron**  
 Size or number **.563" x 1 15/16"**

Starting motor drive end bearing—  
 Make or type **Oilless Bushing**  
 Size or number **.563" x .625" x 3/4"**

Starting motor ~~commutator~~ <sup>middle</sup> bearing—  
 Make or type **Oilless Bushing**  
 Size or number **.7575" x .812" x 23/32"**

Generator commutator end bearing—  
 Make or type **Bushing**  
 Size or number **.5625" x .7836" x 51/64"**

Generator drive end bearing—  
 Make or type **New Departure**  
 Size or number **903203**

Super-charger—  
 Make or type .....  
 Size or number .....

Clutch throwout bearing—  
 Make or type **New Departure**  
 Size or number **954221**

Clutch pilot bearing—  
 Make or type **New Departure**  
 Size or number **907109**

Transmission main shaft pilot bearing—  
 Make or type **Roller - 14 Required**  
 Size or number **1294780**

Transmission reverse idler bearing—  
 Make or type **Bushing**  
 Size or number **553119 (.847" x .987" x 1")**

Transmission main shaft front bearing—  
 Make or type **New Departure**  
 Size or number **954144**

Transmission main shaft rear bearing—  
 Make or type **New Departure**  
 Size or number **954120**

Transmission countershaft front bearing—  
 Make or type **Roller - 26 Required**  
 Size or number **1298445**

Transmission countershaft rear bearing—  
 Make or type **Roller - 26 Required**  
 Size or number **1298445**

Overdrive shaft rear bearing—  
 Make or type .....  
 Size or number .....

## BEARINGS (cont'd)

Overdrive shaft pilot bearing—  
 Make or type .....  
 Size or number .....

Main shaft extension bearing—  
 Make or type .....  
 Size or number .....

Rear axle pinion shaft front bearing—  
 Make or type **New Departure**  
 Size or number **905607**

Rear axle pinion shaft rear bearing—  
 Make or type **Hyatt**  
 Size or number **126047**

Differential right bearing—  
 Make or type **Hyatt**  
 Size or number **149520**

Differential left bearing—  
 Make or type **Hyatt**  
 Size or number **149520**

Rear wheel inner bearing—  
 Make or type **Hyatt**  
 Size or number **111121 (Inner Race - 111122)**

Rear wheel outer bearing—  
 Make or type .....  
 Size or number .....

Front wheel inner bearing—  
 Make or type **New Departure**  
 Size or number **909052 (Cup 909402; Cone 909552)**

Front wheel outer bearing—  
 Make or type **New Departure**  
 Size or number **909001 (Cup 909601; Cone 909501)**

Kingpin upper bearing—  
 Make or type **Split Bushing**  
 Size or number **1266949 (.863" x .987" x 1-1/4")**

Kingpin lower bearing—  
 Make or type **Split Bushing**  
 Size or number **1266949 (.863" x .987" x 1-1/4")**

Kingpin thrust bearing—  
 Make or type **Nice or Hoover**  
 Size or number **134650 or 148393**

Front spring—Bolt—  
 Bushing size .....  
 Bushing type .....

Shackle—  
 Upper end .....  
 Lower end .....

Rear spring—Bolt—  
 Bushing size .....  
 Bushing type .....

Shackle—  
 Upper end .....  
 Lower end .....

Make of Car ..... BUICK ..... Model ..... 1940 SERIES 70 ..... Date ..... Sept. 18, 1939 .....

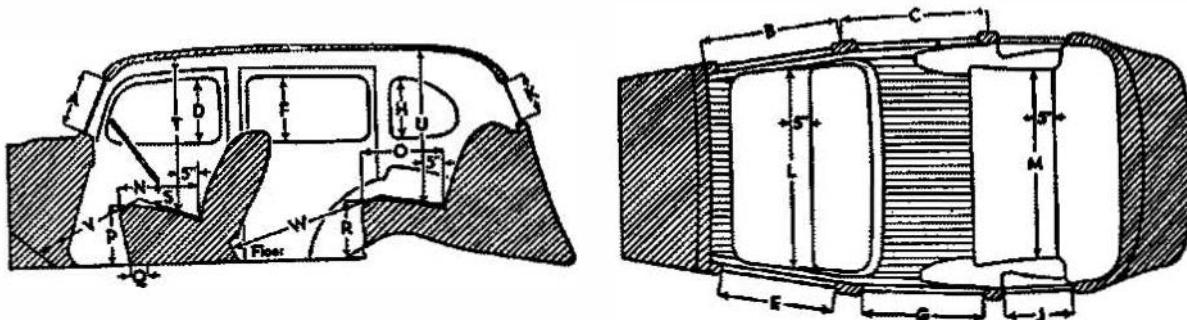
NOTE: (1) List only that equipment which is included in the factory delivered price. Special equipment which is fitted, but not included in the factory delivered price should be listed with its additional price.  
 (2) Enter on top line your own model name, or series mark corresponding to Standard, Deluxe or Custom.

EQUIPMENT	Models		
	Standard	Deluxe	Custom
Catalog Designation of Model .....	Series 70		
Lacquer make .....	Duco		
Body finish, lacquer or synthetic enamel .....	Lacquer		
Fender finish, lacquer or synthetic enamel .....	Lacquer		
Hardware make .....	Terstedt		
Speedometer make .....	AC		
Gasoline gauge make .....	AC		
Thermometer make .....	AC		
Car lock make .....	Briggs & Stratton, or Delco-Remy		
Car lock operates on ignition or ignition and steering .....	Ignition		
Clock make .....	Borg		
Cigar lighter make .....	Casco		
Safety glass make .....	L.O.F.		
Safety glass type, laminated or tempered .....	Safety Plate Glass		
In windshield .....	Laminated		
In side windows .....	Laminated		
In rear window .....	Laminated		
Bumper make .....	Gordon Mfg. Co., or Std. Steel, or U.S.		SpG. & Bumper
Bumper guard make .....	Guide Lamp		
Car heater make .....	Harrison		
No. of tail lights included .....	2		
No. of visors included .....	2		
No. of horns included .....	2		
No. of windshield wipers included .....	2		
No. of windshield washers included .....	1		
No. of spare tires included .....	1		



Make of Car BUICK Model 1940 SERIES 70 Date Sept. 18, 1939

**BODY DIMENSIONS (Five-Passenger, Four-Door Sedan)**



**EXTERIOR**

Overall height, road to roof with no load .....	66-11/16"
Minimum height of floor in front compartment, no load .....	14-15/16"
Minimum height of floor in rear compartment, no load .....	15-3/8"
Distance between hinge centers, front door .....	18-1/4"
Distance between hinge centers, rear door .....	17-3/4"
Windshield opening height (A) .....	15-1/8"
Windshield opening width, to center strip if divided .....	25" Each
Width of front door, at handle (B) .....	39-7/8"
Width of rear door, at handle (C) .....	35-1/4"
Height of front door, maximum .....	46-1/8"
Height of rear door, maximum .....	46-1/8"
Height of window opening in front door, maximum (D) .....	13"
Width of window opening in front door, maximum (E) .....	30-3/4"
Height of window opening in rear door, maximum (F) .....	13"
Width of window opening in rear door, maximum (G) .....	30-1/2"
Height of rear quarter window opening, maximum (H) .....	None
Width of rear quarter window opening, maximum (J) .....	None
Height of rear window opening, maximum (K) .....	12"
Width of rear window opening, maximum (if divided list each) .....	37-3/4"

**INTERIOR**

*All interior body dimensions taken with front seat in its rear position*

Width of front seat cushion, measured 5 inches from back (L) .....	56-1/2"
Width of rear seat cushion, measured 5 inches from back (M) .....	48"
Depth of front seat cushion (N) .....	18-3/8"
Depth of rear seat cushion (O) .....	19-15/16"
Height of front seat cushion (P) .....	13-3/8"
Front seat horizontal adjustment, inches (Q) .....	4-1/2"
Front seat vertical adjustment, inches .....	-
Height of rear seat cushion (R) .....	12-15/16"
Vertical distance between steering wheel and seat cushion (S) .....	4-9/16"
Head room at front seat, measured 5 inches from back (T) .....	36-1/2"
Head room at rear seat, measured 5 inches from back (U) .....	36"
Leg room in front seat, measured from 6 inches up on toe board (V) .....	43"
Leg room in rear seat, measured from center of foot rest (W) .....	41-1/2"
Width of left front pillar on diagonal with door closed .....	4-1/4"

Note: Cushion height and headroom taken 12" from centerline of car.

Make of Car BUICK Model 1940 SERIES 70 Date Sept. 18, 1939

BODY DETAIL AND EQUIPMENT FORMS

DIRECTIONS

Only standard equipment included in the Factory Delivered price shown in column 3 should be listed on this sheet. Please arrange body types in an ascending price scale with the lowest priced type at the top and the highest priced type at the bottom.

IMPORTANT — To save your time, where an item is common to several types, use arrows to indicate the fact as shown in diagrams.

Standard abbreviations may be used where space limitations make this necessary. Where sub-headings such as those shown in column for Body Make are identified with numerals, these numerals may be used in filling in form.

Diagram showing various body styles and their corresponding make abbreviations.

Main specification table with columns: MAKE AND MODEL, BODY TYPE, Factory Delivered Price, Number of Passengers, Wheel-base, Shipping Weight, Seating Arrangement Number, No. of Doors, Body Make, Frame Work, Top Panel, Luggage Compartment, and SPARE WHEEL LOCATION.

\* Full Rear Seat.

SEATING ARRANGEMENT DIAGRAM

